REMARKS/ARGUMENTS

Reconsideration of the present application, as amended, is respectfully requested.

The April 4, 2006 Office Action and the Examiner's comments have been carefully considered. In response, claims are amended and added, and remarks are set forth below in a sincere effort to place the present application in form for allowance. The amendments are supported by the application as originally filed. Therefore, no new matter is added.

SPECIFICATION

In the Office Action the specification is objected to because it does not contain an Abstract of the disclosure as required by 37 CFR 1.72(b). In response, an Abstract of the disclosure is provided on a separate sheet as an appendix to this response.

In view of the amendment of the specification, reconsideration and withdrawal of the objection to the specification are respectfully requested.

PRIOR ART REJECTION

In the Office Action, claims 1-6 and 8 are rejected under 35 USC 103(a) as being unpatentable over USP 5,828,226 (Higgins et al.) in view of USP 5,966,022 (Budnaitis et al.). Claim 7 is rejected under 35 USC 103(a) as being unpatentable over Higgins et al. in view of Budnaitis et al., and further in view of USP 5,500,604 (Swarbrick et al.).

In response, claim 1 is amended to clarify the invention.

Claim 1 now recites a test device for testing an integrated circuit including a plurality of contacts, called a test circuit, intended to be tested with the aid of a test printed circuit, called a main circuit. The test device includes an insulating, non-conductive membrane of a soft material having two opposite surfaces, two conductive layers each covering a respective one of the two opposite surfaces of the non-conductive membrane, and connection means for interconnecting the layers. The two conductive layers are adapted to come into contact with the test circuit and the main circuit respectively, under the influence of a pressing force exerted during the test between the test circuit and the main circuit deforming the test device. The device further includes protrusions arranged on each of at least one of the two conductive layers according to a predefined pattern as a function of the plurality of contacts of the test circuit, so as to ensure a contact quality between the at least one layer and

the test circuit or the main circuit in contact with the at least one layer, under the influence of the pressing force.

A feature of the present claimed invention as defined by amended claim 1 is conductive layers which cover opposite surfaces of a membrane made of soft material and protrusions on one or both conductive layers, i.e., on one or both of the conductive layers there is a plurality of protrusions. Fig. 2 shows the conductive layers 23a, 23b covering the opposite surfaces of the membrane 21 so that the entire upper and lower surfaces of the membrane are covered by conductive material. The protrusions, only one of which is shown in Fig. 2 and designated 22, facilitate contact between the conductive layer on which they are arranged (layer 23a in Fig. 2) and the circuit in contact therewith during testing, i.e., either the test circuit or the main circuit.

The cited prior art does not disclose, teach or suggest all of the features now set forth in independent claim 1.

Higgins et al. describes a probe assembly for use in testing integrated circuits which includes a compliant interconnect 17 having an elastomeric substrate and pins 49 arranged therein. Each pin 49 has an upper portion above the upper surface of the substrate, a lower portion below the lower surface of the substrate and a connecting portion extending through the

substrate between the upper and lower portions of the pin (see FIG. 1).

Higgins et al. do not disclose conductive layers which cover opposite surfaces of a membrane and also do not disclose protrusions arranged on one of these conductive layers.

Budnaitis et al. describe a technique for performing reliability screening on semi-conductor wafers in which a contact sheet 9 is interposed between a base unit 7 having terminals and a wafer 1 having contact pads 3. Contact sheet 9 has bumps 18 on a lower surface adapted to engage with the contact pads 3 on the wafer 1 and bumps 20 on an upper surface adapted to engage with a conductive member 8.

Budnaitis et al. do not disclose conductive layers which cover opposite surfaces of an insulating, non-conductive membrane and therefore cannot teach or suggest protrusions on such conductive layers.

Swarbrick et al. also do not disclose, teach or suggest the features of independent claim 1, e.g., protrusions on a conductive layer covering a surface of a membrane made of soft material.

None of the other references of record close the gap between the present claimed invention as defined by claim 1 and Higgins et al., Budnaitis et al., and Swarbrick et al.

In view of the foregoing, independent claim 1 is patentable

over Higgins et al. in combination with Budnaitis et al. and Swarbrick et al. and any of the other references of record under 35 USC 102 as well as 35 USC 103.

Claims 2-8 depend on claim 1 and are patentable over the references of record in view of their dependence on claim 1 and because the references of record do not disclose, teach or suggest each of the limitations set forth in claims 2-8. For example, the cited prior art does not disclose, teach or suggest the features of claim 2, i.e., metallized holes passing through a membrane and two conductive layers (which cover opposite surfaces of a membrane made of soft material).

In view of the foregoing, it is respectfully submitted that the Examiner's rejections of claims 1-8 under 35 USC 103 have been overcome and should be withdrawn and that claims 1-8 are in form for immediate allowance, which action is earnestly solicited.

NEW CLAIMS

Claims 11-20 are added and all are directed to the elected invention.

Claims 11-15 depend from claim 1 and set forth additional features of the test device thereof. Claims 11-15 are patentable in view of their dependence on claim 1 and because the references of record do not disclose, teach or suggest each of the

limitations set forth in claims 11-15.

Claim 16 is a second independent claim which includes features similar to those of claim 1 and further recites that the connection device includes holes passing through the membrane and through the conductive layers. This feature is also set forth in claim 2.

The cited prior art does not disclose, teach or suggest metallized holes passing through a membrane and two conductive layers which are arranged on opposite surfaces of a membrane made of soft material.

Claims 17-20 depend from claim 16 and set forth additional features of the test device thereof. Claims 17-20 are patentable over the references of record in view of their dependence on claim 16 and because the references do not disclose, teach or suggest each of the limitations set forth in claims 17-20.

It is respectfully believed that no fee is due for the presentation of claims 11-20. If, however, it is determined that a fee is due for the presentation of any of claims 11-20, please charged Deposit Account No. 06-1378 for such sum.

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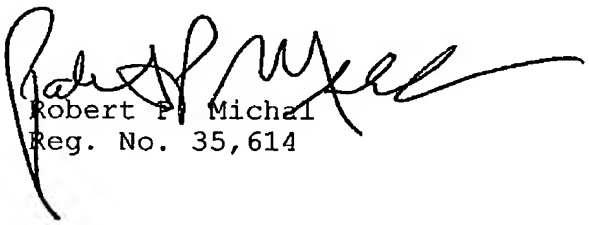
If the Examiner disagrees with any of the foregoing, the Examiner is respectfully requested to point out where there is support for a contrary view.

Entry of the amendment, allowance of the claims, and the passing of the application to issue are respectfully solicited.

If the Examiner has any comments, questions, objections or recommendations, the Examiner is invited to telephone the undersigned at the telephone number given below for prompt action.

Respectfully submitted,



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